

Appln. No.: 10/656,392  
Amendment August 15, 2005  
Reply to Office Action of May 13, 2005

MKPA-107US

**Remarks/Arguments:****Claim Status**

Claims 1-15 are pending, while claims 9-15 are withdrawn from consideration.

By this Amendment, claims 1-3 and 8 are amended.

No new matter is added by the claim amendments, and accordingly, entry and approval of same is respectfully requested. Support for the claim amendments is found throughout the original specification, and, more particularly, in the original specification, at paragraphs [0036] and [0037]. The first and second directions (e.g., horizontal and vertical directions) recited in claim 1 are not explicitly stated in the specification. However, in view of original claims 2 and 3 and paragraphs [0031] and [0032], it is submitted that one of ordinary skill in the art would understand that such a feature is inherent from the disclosure in the specification.

**Rejection of Claims 1-6 Under 35 U.S.C. § 102(b)**

In the Action at pages 2-3, claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Shiga et al. (EP-036596A2) (hereafter referred to as EP '596) or (U.S. Patent No. 4,955,683) (hereafter referred to as US '683) or, alternatively, by Boigontier et al. (U.S. Patent No. 4,984,866) (hereafter referred to as Boigontier).

Reconsideration is respectfully requested.

**Claim 1**

Claim 1 is directed to a solder preform for attaching an optical fiber, and recites "the groove being larger in size than the optical fiber to allow alignment of the optical fiber within the groove such that the solder preform is configured to permit alignment of the optical fiber in first and second directions when the groove of the solder preform is placed over the optical fiber."

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### Shiga References

It is believed that the EP '596 reference and the US '683 reference are corresponding patent applications. Accordingly, it is submitted that claim 1 is patentable over EP '596 for the same or similar reasons as set forth below for US '683.

US '683 reference discloses that "the end 1a of the optical fiber 1 is positioned so as to be optically connected to the pin-photodiode 9... In the cavities 5a are inserted the legs of a preform structure 7 bridged over the end 1a of the optical fiber 1 positioned on the top of the fiber saddle 5." (See US '683 at col. 2, line 66 to col. 3 line 5.) Moreover, after the preform structure 7 and fiber saddle are so arranged, they are heated to melt the preform structure 7. That is, the optical fiber 1 of U.S. '683 is aligned with the pin-photodiode 9, then the solder preform is bridged over the end 1a of the optical fiber 1.

It is submitted that the US '683 reference does not disclose or suggest the "alignment of the optical fiber within the groove," because alignment of the optical fiber and groove never occurs and, furthermore and more particularly, that "the solder preform is configured to permit alignment of the optical fiber in first and second directions when the groove of the solder preform is placed over the optical fiber," as required by claim 1. The solder preform of US '683 is not configured to permit alignment of the optical fiber when the groove of the solder preform is placed over the optical fiber because alignment in US '683 occurs before the solder preform is placed over the optical fiber. Moreover, US '683 is silent regarding the solder preform being configured to permit alignment in first and second directions.

### Boisgontier Reference

Boisgontier, similar to that of US '683, discloses providing "an optimum optical position by guidance from the variations in optical coupling obtained... The preform strip of solder is then put into place on the length of optical fiber 43." (See Boisgontier at col. 12, lines 54-59.) That is, the end of the fiber 43 is first aligned with chip 48 using feedback from the optical coupling and then the solder preform is put in place.

It is submitted that Boisgontier does not disclose or suggest the "alignment of the optical fiber within the groove," because alignment of the optical fiber and groove never occurs and, furthermore and more particularly, that "the solder preform is configured to permit alignment of the optical fiber in first and second directions when the groove of the solder preform is placed

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over the optical fiber," as required by claim 1. This is because, like that of US '683, alignment in Boisgontier occurs between the chip 48 and the end of the optical fiber 43, and before the solder preform is even put in place. Moreover, Boisgontier is silent regarding the solder preform being configured to permit alignment in first and second directions.

It is submitted that the cited art does not teach, disclose or suggest, each and every limitation of claim 1. Accordingly, claim 1 is submitted to be patentable.

**Rejection of Claim 7 Under 35 U.S.C. § 103(a)**

In the Action at page 4, claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over EP '596 or US '683 in view of Enochs (U.S. Patent No. 4,702,547).

Reconsideration is respectfully requested.

Claim 7 includes all of the limitations of claim 1 and is submitted to be patentable over EP '596 or US '683 for the same reasons as claim 1.

It is submitted that Enochs does not overcome the deficiencies of either EP '596 or US '683 because it does not disclose or suggest "the groove being larger in size than the optical fiber to allow alignment of the optical fiber within the groove such that the solder preform is configured to permit alignment of the optical fiber in first and second directions when the groove of the solder preform is placed over the optical fiber," as required by claim 1.

Contrary to the structure recited in claim 1, in the Enochs optical fiber package, the optical fiber 12 is disclosed to be a diameter of about 125 microns and the groove 18 to be approximately 125 microns wide and 125 microns deep. Accordingly, the optical fiber 12 in Enochs is not larger in size than the groove 18 and the optical fiber 12 is not configured to permit alignment of the optical fiber 12 because it contacts the groove 18 after being positioned therewithin. Moreover, Enochs is silent regarding "the solder preform being configured to permit alignment in first and second directions.

The cited art taken singularly or in any proper combination does not disclose or suggest the limitations in claim 1. Accordingly, claim 7 which includes all of the limitations of claim 1 is submitted to be allowable over the combination of either EP '596 and Enochs or US '683 and Enochs.

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**Allowable Subject Matter**

The Examiner is thanked for the acknowledgement that claim 8 is allowable if properly written in independent form. However, since it is submitted that claim 1 is patentable, claim 8 which depends therefrom has not been so rewritten.

Reconsideration is respectfully requested.

**Conclusion**

In view of the claim amendments and remarks set forth above, Applicants respectfully submit that claims 1-8 are in condition for allowance and early notification to that effect is earnestly solicited.

Respectfully submitted,



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